PERMIT FOR A SOLID WASTE MANAGEMENT FACILITY

NORTH DAKOTA DEPARTMENT OF ENVIRONMENTAL QUALITY – DIVISION OF WASTE MANAGEMENT
TELEPHONE: 701-328-5166 REV. 9/2021

Pursuant to Chapter 23.1-08 of the North Dakota Century Code (NDCC), (Solid Waste Management and Land Protection Act), and Article 33.1-20 of the North Dakota Administrative Code (NDAC), (Solid Waste Management Rules), and in reliance on statements and representations heretofore made by the owner or owner's representative designated below, a permit is hereby issued authorizing such Permittee (Permittee) to construct and operate a solid waste management facility at the designated location under any and all conditions.

A. Owner/Operator (Permittee):

1. **Name:** Waste Management of North Dakota, Inc./Big Dipper Enterprises, Inc. (Dakota Municipal Solid Waste Landfill)
2. **Mailing Address:** P.O. Box 218, Gwinner, ND 58040
3. **Location Address:** 7972 129th Avenue SE, Gwinner, ND 58040

B. Permit Number: 0257

C. Solid Waste Management Units:

1. Municipal Solid Waste Landfill
2. Small Volume Industrial Waste and Special Waste Landfill
3. Scrap Metal and Appliance Pile
4. Surface Impoundments
5. Closed Municipal Solid Waste Landfill

D. Location Information:

1. **General:** W1/2 of Sec 10, TWP 132N, R 56W in Sargent County
2. **Permit Area:** As described in referenced documents and facility files – approximately 320 acres.
3. **Latitude:** 46.258532° **Longitude:** -97.692866°

E. General Conditions:

E.1. The Permittee of the facility is subject to the Solid Waste Management and Land Protection Act (NDCC Chapter 23.1-08), the Solid Waste Management Rules (NDAC Article 33.1-20), all other North Dakota and federal laws, rules or regulations and orders now or hereafter effected by the North Dakota Department of Environmental Quality (hereinafter the Department), and to all conditions of this permit.

E.2. Compliance with terms of this permit does not constitute a defense to any order issued or any action brought under NDCC Chapter 23.1-08, NDAC Article 33.1-20, NDCC Chapter 23.1-04, NDAC Article 33.1-24, Sections 3013, 7003, or 3008(a) of Resource Conservation and Recovery Act (RCRA), Sections 106(a), 104 or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 et. seq.) or any other law providing for protection of public health or the environment.

E.3. Issuance of this permit does not convey property rights of any sort or any exclusive privilege, nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local law or regulations. (NDAC Section 33.1-20-02.1-06)

E.4. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (NDAC Section 33.1-20-02.1-04)

E.5. This permit is based on the premise that the information submitted by the Permittee is accurate and that the facility will be or has been constructed and will be operated or has been as specified in the application and all related documents. Any inaccuracies or misrepresentations found in the application may be grounds for the termination or modification of this permit. The Permittee must inform the Department of any deviation from, or changes in, the information in the application which would affect the Permittee's ability to comply with the applicable rules or permit conditions. (NDAC Section 33.1-20-02.1-07)

E.6. The Permittee shall at all times properly operate and maintain the facility, solid waste management units, and related appurtenances which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit. (NDAC Section 33.1-20-02.1-04)

E.7. The Permittee shall give notice to the Department of any planned physical alterations or additions to permitted solid waste management units. Any physical change in, or change in the method of the operation of, a treatment or disposal operation shall be considered to be construction, installation or establishment of a new operation. No construction, installation or establishment of a new operation shall be commenced unless the Permittee thereof shall file an application for, and receive, a permit from the Department. (NDAC Section 33.1-20-02.1-04 and NDAC Section 33.1-20-02.1-07)

a. The Permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

b. The Permittee shall provide to appropriate representatives that will be involved in routine operation of the facility a copy of the approved Plan of Operation (including waste acceptance procedures). The training and educational material shall be repeated and/or amended as necessary to ensure compliance with the waste

acceptance procedures and the permit.

c. Whenever the Permittee becomes aware that the Permittee failed to submit any relevant facts in the permit application or submitted incorrect information in the permit application or in any report to the Department, the Permittee shall promptly submit such facts or information.

E.8. The Permittee shall construct, operate, maintain and close the solid waste management units and the facility according to the criteria of law and rule, conditions of this permit, and other reasonable precautions to prevent or minimize, if applicable, any environmental impacts including, but not limited to, fugitive dust emissions, objectionable odors, air toxics and gas emissions, spills, litter, and contamination of surface water and groundwater. (NDAC Section 33.1-20-02.1-04 and NDAC Subsections 33.1-20-04.1-02(1) – (6))

E.9. The Permittee shall furnish to the Department, within a reasonable time, any relevant information which the Department may request to determine whether cause exists for modifying, reissuing or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit. (NDAC Section 33.1-20-02.1-07 and NDAC Section 33.1-20-04.1-04)

E.10. This permit may be modified, revoked and reissued, or terminated for cause as specified in NDAC Section 33.1-20-02.1-07. The filing of a request for permit modification, revocation and reissuance, termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition.

This permit may be renewed as specified in NDAC Section 33.1-20-02.1-08. Review of any application for a permit renewal shall consider improvements in the state of control and measurement technology, compliance with state rules and permit, as well as changes in applicable regulations.

E.11. This permit addresses only the environmental aspects and operational procedures of the facility. It does not supersede local zoning authority or any other requirements of any political subdivision of the state. The Permittee must obtain any and all local zoning, conditional use permits, or meet any other county, township or municipal requirements prior to commencing construction and/or operation. (NDAC Section 33.1-20-02.1-06 and SFN 19269)

E.12. The Permittee shall design, close, maintain and operate the facility in a manner to minimize the possibility of a fire, explosion or any unplanned sudden or nonsudden release of solid waste or solid waste constituents to air, soil, groundwater or surface water which could threaten human health or the environment. (NDAC Section 33.1-20-04.1-02)

E.13. Any entity that controls the permit holder (Permittee) agrees to accept responsibility for any remedial measures, closure and postclosure care or penalties incurred by the Permittee. For purposes of this permit, "control" means ownership or control, directly, indirectly, or through the actions of one or more persons of the power to vote 25% or more of any class of voting shares of a permit holder, or the direct or indirect power to

control in any manner the election of a majority of the directors of a permit holder, or to direct the management or policies of a permit holder, whether by individuals, corporations, partnerships, trusts, or other entities or organization of any type. Within thirty (30) days of the issuance of this permit, if not previously provided with the application, or within thirty (30) days of the existence of any new controlling entity, the Permittee shall submit to the Department the name of the controlling entity, a statement signed by the controlling entity in which the controlling entity agrees to accept responsibility for any remedial measures, closure, and postclosure care or penalties incurred by the Permittee and a disclosure statement from the controlling entity containing the same information as required from permit applicants under NDCC Section 23.1-08-17. (NDCC Subsection 23.1-08-09(1))

E.14. All personnel involved in solid waste handling and in the facility operation or monitoring must be provided a copy of this permit and shall be instructed in specific procedures to ensure compliance with the permit, the facility plans and the state rules as necessary to prevent accidents and environmental impacts. Documentation of training such as names, dates, description of instruction methods and copies of certificates awarded must be placed in the facility's operating record. (NDAC Section 33.1-20-04.1-02)

E.15. Except as modified by conditions of this permit or future approvals from the Department, this facility and related solid waste management units and structures shall be designed, constructed, operated and closed in accordance with previous correspondence and documents contained in Departmental files pertaining to this facility and as described in the documents listed in Attachment 1, which are hereby incorporated by reference in this permit. Future submittals approved by the Department may supersede or supplement items listed in Attachment 1. (NDAC Section 33.1-20-02.1-04)

E.16. All facility reports shall be submitted to the Department in a digital or electronic format as a searchable PDF format document unless otherwise requested. In some cases, the Department may request hard copies in addition to electronic format. Reports shall be sent to solidwaste@nd.gov.

Recordkeeping and reporting shall be in accordance with NDAC Section 33.1-20-04.1-04 and as described in the approved Plan of Operations.

The Permittee shall submit an annual report to the Department by March 1st of each year in accordance with NDAC Subsection 33.1-20-04.1-04(3).

The Permittee shall submit an annual groundwater report to the Department by April 1st of each year in accordance with NDAC Subsection 33.1-20-04.1-04(4).

E.17. The Permittee shall complete the Department's Waste Rejection Report (SFN 60120) and notify the Department within five (5) days of any wastes rejected and not accepted by the facility. (NDAC Subsection 33.1-20-04.1-02(8))

E.18. Within sixty (60) days of the issuance of this permit, if not already completed, the Permittee shall record a notarized affidavit with the County Recorder. The affidavit shall specify that this facility, as noted in the legal description, is permitted to accept solid wastes for disposal. This affidavit shall specify that another affidavit must be recorded upon the facility's final closure.

Upon closure, a second affidavit shall be recorded specifying any final details regarding the types of waste disposed at the facility, as well as any final details regarding the facility's location, construction, management, etc.

The Department must be provided a copy of both affidavits, certified by the County Recorder of the county in which the facility is located. The copies must be forwarded to the Department within thirty (30) days of recorded dates, or if notification has already been completed, within thirty (30) days of the permit issuance date. (NDAC Section 33.1-20-02.1-05)

F. Municipal Solid Waste Landfill Specific Conditions:

F.1. The following wastes are prohibited from disposal at this facility:

- Hazardous waste, except in amounts normally in household waste;
- Lead acid batteries;
- Liquids, except in amounts normally in household waste;
- Major appliances;
- Municipal waste incinerator ash;
- Other waste, if the department determines that such waste has toxic or adverse characteristics which can impact public health or environmental resources;
- Pesticide containers which are not empty and have not been triple-rinsed, except those normally in municipal waste;
- Polychlorinated biphenyls (PCB) waste as defined in 40 CFR part 761;
- Regulated infectious waste, except in amounts normally in household waste;
- Special waste; and
- Technologically enhanced naturally occurring radioactive material (TENORM) waste
- Used oil

(NDAC Subsection 33.1-20-06.1-02(8) and NDAC Section 33.1-20-11-02)

F.2. The facility is authorized only for the disposal of municipal solid wastes. "Municipal waste" means solid waste that includes garbage; refuse; and trash generated by households, motels, hotels, recreation facilities, public and private facilities; and commercial, wholesale, private, and retail businesses. The term does not include special waste or industrial waste.

The facility is limited to accepting an average of 500 tons or less per day.

(NDCC Subsection 23.1-08-02(10) and NDAC Subsection 33.1-20-15-01(c))

F.3. Waste containing free liquids is not approved for transport or delivery to the facility. "Free liquid" means the liquid which separates from the solid portion of a solid waste under ambient pressure and normal, above freezing temperature. The environmental protection agency paint filter liquids test method or visual evidence must be used to determine if a waste contains free liquid. (NDAC Subsection 33.1-20-01.1-03(32))

At minimum, visual observation of the waste at both the entry to the facility and at the working face shall be used to inspect waste arriving at the facility. The EPA Paint Filter Liquids Test (Method 9095B) protocol shall be used for all waste in which visual

observation is not conclusive or if there is any question on free liquids. (NDAC Item 33.1-20-04.1-03(1)(h)(4)(n))

F.4. Any waste sampling and analysis must be representative of the waste using approved sampling and analytical procedures. All analysis must be performed by a Departmentally certified and approved laboratory or survey procedure documenting whether the waste meets limits established by rule, permit and Department approved waste acceptance procedures. (NDAC Section 33.1-20-01.1-13 and NDAC Paragraph 33.1-20-04.1-03(1)(h)(2))

F.5. Waste accepted at the facility shall not be stored, stockpiled or placed anywhere on the facility other than the approved disposal area. (NDAC Subdivision 33.1-20-04.1-03(1)(b))

F.6. Any new or lateral expansion of a municipal solid waste landfill must be underlain with a hydraulic barrier and leachate removal system capable of collecting and removing leachate and contaminated surface water within the landfill.

The liner must consist of one of the following:

a. A natural soil liner constructed of at least four feet of natural soil having a hydraulic conductivity not to exceed 1×10^{-7} centimeters per second; or

b. A composite liner consisting of two components: the upper must consist of a minimum thirty mil flexible membrane liner, and the lower component must consist of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} centimeters per second. Flexible membrane liner components consisting of high-density polyethylene must be at least sixty mil thick. The flexible membrane liner component must be installed in direct and uniform contact with the compacted soil component; or

c. An alternative liner and leachate removal system approved by the Department. The Department must consider factors such as the proposed system's ability to control leachate migration, the hydrogeologic characteristics of the site and surrounding land, the climate of the area, or the potential leachate quality.

The facility must be constructed as designed and detailed in the permit application submitted to the Department on April 12, 2012 and June 2, 2021.

(NDAC Subsection 33.1-20-06.1-02(2))

F.7. Prior to any digging or disturbance of any known underground mine area, an approved reclamation plan for all acres disturbed will be given to the Department for approval. (NDAC Paragraph 33.1-20-04.1-01(2)(a)(4))

F.8. Methane and other gases from waste decomposition may not be allowed to migrate laterally from the landfill to endanger structures, environmental resources, or adjacent properties.

a. The concentration of methane gas generated by landfills on the facility must not exceed twenty-five (25) percent of the lower explosive limit for methane in structures or appurtenances on the facility.

b. The concentration of methane gas must not exceed the lower explosive limit for methane at the facility boundary.

c. Monitoring of methane gas must be conducted at the frequency in the approved methane monitoring plan to assure the standards of subdivisions a and b are met.

d. If methane gas levels exceed the standards of subdivisions a and b, the owner or operator must:

1. Immediately take action to protect public health;
2. Notify the department within seven (7) days; and
3. Implement remedial measures within sixty (60) days

(NDAC Subsection 33.1-20-06.1-02(4))

F.9. The Permittee shall conduct self-inspections in accordance with the approved inspection procedures. (NDAC Subsection 33.1-20-04.1-02(8))

F.10. During excavation and construction of any disposal unit, surface impoundment, or other solid waste unit, any layers of materials with a higher hydraulic conductivity, including, but not limited to, areas of sand, silty sand, gravel and/or lignite over eight (8.0) inches in thickness, or any areas where in-situ clay-rich soils underlying the base of the solid waste unit are less than three (3) feet thick, the base shall be over-excavated and replaced with at least three (3) feet of carefully compacted clay-rich soil to establish a geologic barrier to leachate migration. At minimum, sand or lignite zones less than eight (8.0) inches in thickness shall be scarified, mixed with in-situ shale or clay-rich sediments to a depth of 12 inches, visually classified, recompacted and tested as described in Section IV, Subbase Preparation, of the Department's *Guideline 5 – Quality Assurance for Construction of Landfill and Surface Impoundment Liners, Caps and Leachate Collection Systems* (see attachment 2). Replacement of the zones of higher hydraulic conductivity and the placement of compacted clay shall be addressed in the final quality assurance/quality control report to the Department. (NDAC Subsection 33.1-20-04.1-01(2))

F.11. A uniform compacted layer of six (6) inches or more of suitable earthen material or other departmentally approved material must be placed on all solid waste by the end of each working day. (NDAC Subsection 33.1-20-06.1-02(9))

F.12. On all areas of the landfill where final cover or additional solid waste will not be placed within one (1) month, six (6) inches or more of compacted clay-rich soil material or other departmentally approved material must be placed. (NDAC Subsection 33.1-20-06.1-02(10))

F.13. All earthen material must be maintained on-site (to be used for all construction, cover, closure and revegetation activities) unless removal from the site is authorized by the Department. (NDAC Subdivision 33.1-20-04.1-09(2)(k))

F.14. Suitable plant growth material (SPGM) topsoil and SPGM subsoil shall be used for site closure. Any extra material shall be stored in approved areas for use in site maintenance and closure repair. All SPGM shall be replaced upon site or area reclamation. (NDAC Subdivision 33.1-20-04.1-09(2)(f))

F.15. Sequential closure of solid waste disposal units shall be implemented as described in the approved closure plan.

F.16. The facility shall be operated in full accordance with the approved plan of operation and the waste screening provisions. (NDAC Section 33.1-20-04.1-03)

G. Small Volume Industrial Waste and Special Waste Landfill Specific Conditions:

G.1. The following wastes are prohibited from disposal at this facility:

- Regulated infectious waste, except in amounts normally in household waste;
- Used oil as a free liquid;
- Hazardous waste; and
- TENORM waste

(NDAC Subsection 33.1-20-07.1-01(2))

G.2. The facility is authorized only for the disposal of industrial waste, EPA-exempt natural gas and crude oil exploration and production special waste, and other wastes as identified in the permit application, Departmentally-approved facility waste acceptance plan, elsewhere in this permit, or through Departmental correspondence. The facility may accept other types of special waste upon approval from the Department.

"Industrial waste" means solid waste, which is not a hazardous waste regulated under chapter 23.1-04, generated from the combustion or gasification of municipal waste and from industrial and manufacturing processes. The term does not include municipal waste or special waste. (NDCC Subsection 23.1-08-02(5))

The facility is limited to accepting 25,000 tons per year or 3,000 tons in any one month of industrial waste unless larger amounts in one month resulting from remediation of spills or cleanup projects are approved by the Department. (NDAC Subdivision 33.1-20-01.1-11(1)(b))

"Inert waste" means nonputrescible solid waste which will not generally contaminated water or form a contaminated leachate. Inert waste does not serve as a food for vectors. Inert waste includes: construction and demolition material such as metal, wood, bricks, masonry and cement concrete; asphalt concrete; metal; tree branches; bottom ash from coal-fired boilers that is not CCR; and waste coal fines from air pollution control equipment. (NDAC Subsection 33.1-20-01.1-03(46))

"Special waste" means solid waste that is not a hazardous waste regulated under chapter 23.1-04 and includes waste generated from energy conversion facilities; waste from crude oil and natural gas exploration and production; waste from mineral and ore mining, beneficiation, and extraction; and waste generated by surface coal mining operations. The term does not include municipal waste or industrial waste. (NDCC

Subsection 23.1-08-02(16))

The facility is not approved for the management or disposal of TENORM equal to or greater than 5.0 picocuries per gram (pCi/g) of combined radium-226 (Ra-226) plus radium-228 (Ra-228).

G.3. Waste containing free liquids is not approved for transport or delivery to the facility. "Free liquid" means the liquid which separates from the solid portion of a solid waste under ambient pressure and normal, above freezing temperature. The environmental protection agency paint filter liquids test method or visual evidence must be used to determine if a waste contains free liquid. (NDAC Subsection 33.1-20-01.1-03(32))

At minimum, visual observation of the waste at both the entry to the facility and at the working face shall be used to inspect waste arriving at the facility. The EPA Paint Filter Liquids Test (Method 9095B) protocol shall be used for all waste in which visual observation is not conclusive or if there is any question on free liquids. (NDAC Subparagraph 33.1-20-04.1-03(1)(h)(4)(n))

G.4. Any waste sampling and analysis must be representative of the waste using approved sampling and analytical procedures. All analysis must be performed by a Departmentally certified and approved laboratory or survey procedure documenting whether the waste meets limits established by rule, permit and Department approved waste acceptance procedures. (NDAC Section 33.1-20-01.1-13 and NDAC Paragraph 33.1-20-04.1-03(1)(h)(2))

G.5. Prior to storage, treatment or disposal of wastes, the Permittee will obtain, at a minimum, the following information:

a. Name and address of the generator;

b. A generator contact person and telephone number;

c. The source of the waste (facility's name and legal description of location);

d. The name of the company managing the waste, if other than the generator;

e. The name of the waste transporter, Solid Waste Transporter Permit Number and if TENORM waste is being hauled, the TENORM Waste Transporter License Number;

f. Physical description of the waste (e.g., solid, liquid, sludge);

g. Amount of wastes (e.g., tons, yards, drums);

h. Description of the process through which the waste was generated (e.g., tank bottoms, drill pit mud);

i. Appropriate analysis specific to that waste, if the waste is not uniquely associated with crude oil and natural gas exploration and production, to identify any hazardous waste characteristics; and

j. Signed statement by the generator that, to their knowledge, this waste is not, by definition, a hazardous or radioactive waste, the waste has not been diluted to reduce TENORM levels, and that the waste, as delivered to the facility will not contain free liquids.

k. This information shall be retained in the operating record of the facility and copies of such information shall be included as a separate attachment in the monthly report and marked as confidential as allowed by NDCC Section 44-04-18.4.

(NDCC Section 23.1-08-14 and NDAC Subdivision 33.1-20-03.1-02(6)(b))

G.6. Waste accepted at the facility shall not be stored, stockpiled or placed anywhere on the facility other than the approved disposal area. (NDAC Subdivision 33.1-20-04.1-03(1)(b))

G.7. All incoming waste to the facility shall be surveyed for radiation utilizing the facility's Department approved radiation surveying procedure and equipment at or near the entrance to the facility, prior to any off-loading or disposal. Radiation survey results shall be recorded and included in the monthly report.

a. Waste that is suspected by the waste generator to contain TENORM concentrations of less than 5.0 pCi/g of combined Ra-226 plus Ra-228 and which the surveyed results are less than the approved survey level, may be accepted for disposal in accordance with the approved plan of operation.

b. For waste that is suspected to contain TENORM in which the surveyed results are equal to or exceed the approved survey level, the Permittee must either reject the waste or place the waste in a Department approved portion of the disposal area while waiting for analytical results. The waste shall be covered and secured and shall not be held for longer than 45 days, otherwise the waste must be rejected.

1. If the waste has concentrations less than 5.0 pCi/g of combined Ra-226 plus Ra-228, the waste may be accepted for disposal in accordance with the approved plan of operation.

2. If the waste has concentrations equal to or greater than 5.0 pCi/g of combined Ra-226 plus Ra-228, the waste must be rejected.

c. For any waste that is not suspected to contain TENORM in which the surveyed results are equal to or exceed the approved survey level, the Permittee must do a physical inspection of the waste to determine if TENORM or regulated radioactive waste has been incorporated within or added to the waste.

1. If identifiable TENORM or regulated radioactive waste is observed, the waste must be rejected.

2. If identifiable TENORM is not observed in the waste but naturally occurring radioactive material (NORM) is observed, the NORM should be removed, if possible, to determine if the remaining waste is below the approved survey level. If the waste is below the approved survey criteria, the entire waste may be accepted for disposal in accordance with the approved plan of operation.

3. If identifiable TENORM or regulated radioactive waste is not observed and after the removal of the observed NORM waste, and the re-survey of the waste is equal to or above the approved survey level, then the Permittee must either reject the waste or place the waste in a Department approved portion of the disposal area while waiting for analytical results. The waste shall be covered and secured and shall not be held for longer than 45 days, otherwise the waste must be rejected.

    i. If the waste has concentrations less than 5.0 pCi/g of combined Ra-226 plus Ra-228, the waste may be accepted for disposal in accordance with the approved plan of operation.

    ii. If the waste has concentrations equal to or greater than 5.0 pCi/g of combined Ra-226 plus Ra-228, the waste must be rejected.

Waste rejection must follow the procedures in condition E.17.

(NDAC Subdivision 33.1-20-04.1-03(1)(a), NDAC Subparagraph 33.1-20-04.1-03(1)(h)(4)(d))

G.8. The Permittee shall conduct random waste characterization and screening. The Permittee shall randomly collect a composite representative sample of waste from 1% of the incoming loads of the production waste subset of special waste and have the sample analyzed for:

1. Total Petroleum Hydrocarbons (TPH) as Diesel Range Organics (DRO) and Gasoline Range Organics (GRO);
2. RCRA metals;
3. TENORM radioactivity level for combined Ra-226 plus Ra-228;
4. Benzene, Toluene, Ethyl benzene and Xylene (BTEX);
5. Ignitability; and
6. Free liquids using both a visual assessment and an EPA Paint Filter Test.

The sampling methodologies and testing criteria for random special waste characterization shall conform to the requirements of a Department-approved sampling and analysis plan using approved screening and analytical methods.

On a case-by-case basis, the Department may approve a reduction of random waste sampling for large projects in which the wastes are characteristically similar and are generated from a contiguous source such as a waste clean-up project, oilfield exploration/drilling and similar activities. The Permittee must obtain written Department approval prior to reducing sampling. The Department reserves the right to require modification to random waste sampling as deemed necessary.

(NDAC Subdivision 33.1-20-04.1-03(1)(h))

G.9. Any waste material suspected to contain TENORM or likely to have accumulated TENORM in concentrations equal to or greater than 5.0 pCi/g shall be analyzed for Ra-226 and Ra-228 concentrations by a state-approved analytical procedure. If the total analytical measured concentrations of combined Ra-226 plus Ra-228 are equal to or greater than 5.0 pCi/g, the waste will not be allowed for acceptance, treatment or disposal at the facility and shall be rejected.

This permit does not authorize any waste or product centrifuging, filtering or similar processing to separate oil, water and/or solids on this site. This permit does not authorize any diluting to reduce TENORM levels.

(NDAC Subdivision 33.1-20-04.1-03(1)(a) and NDAC Subsection 33.1-20-07.1-01(2))

G.10. The facility shall be operated in full accordance with the approved plan of operation and the waste screening provisions. (NDAC Section 33.1-20-04.1-03)

G.11. The Permittee shall conduct self-inspections in accordance with the approved inspection procedures. (NDAC Subsection 33.1-20-04.1-02(8))

G.12. During excavation and construction of any disposal unit, surface impoundment, or other solid waste unit, any layers of materials with a higher hydraulic conductivity, including, but not limited to, areas of sand, silty sand, gravel and/or lignite over eight (8.0) inches in thickness, or any areas where in-situ clay-rich soils underlying the base of the solid waste unit are less than three (3) feet thick, the base shall be over-excavated and replaced with at least three (3) feet of carefully compacted clay-rich soil to establish a geologic barrier to leachate migration. At minimum, sand or lignite zones less than eight (8.0) inches in thickness shall be scarified, mixed with in-situ shale or clay-rich sediments to a depth of 12 inches, visually classified, recompacted and tested as described in Section IV, Subbase Preparation, of the Department's *Guideline 5 – Quality Assurance for Construction of Landfill and Surface Impoundment Liners, Caps and Leachate Collection Systems* (see attachment 2). Replacement of the zones of higher hydraulic conductivity and the placement of compacted clay shall be addressed in the final quality assurance/quality control report to the Department. (NDAC Subsection 33.1-20-04.1-01(2))

G.13. On all areas of the landfill where final cover or additional solid waste will not be placed within six (6) months, eight (8) inches or more of compacted clay-rich soil material, similar material, or a synthetic cover must be placed to prevent ponding of surface water, to minimize infiltration of surface water, and to control windblown dust. (NDAC Subsection 33.1-20-07.1-01(1))

G.14. All earthen material must be maintained on-site (to be used for all construction, cover, closure and revegetation activities) unless removal from the site is authorized by the Department. (NDAC Subdivision 33.1-20-04.1-09(2)(k))

G.15. Suitable plant growth material (SPGM) topsoil and SPGM subsoil shall be used for site closure. Any extra material shall be stored in approved areas for use in site maintenance and closure repair. All SPGM shall be replaced upon site or area reclamation. (NDAC Subdivision 33.1-20-04.1-09(2)(f))

H. Facility Specific Conditions:

H.1. The facility shall provide the funds necessary to employ an inspector for conducting on-site inspection services at the facility. The Permittee shall provide funds by July first of each year for salary, wages, adequate office space approved by the Department, and operating expenses associated with employing an inspector for the facility. (NDCC Section 23.1-01-06)

H.2. The Permittee shall obtain and analyze a representative sample of leachate/contact water contained in any leachate collection or accumulation system, sump and/or other accumulation area, any surface impoundment and stormwater pond at the same frequency and for the same parameters in the facility's approved groundwater monitoring program. The analytical results shall be submitted to the Department with the groundwater monitoring report. (NDAC Paragraph 33.1-20-04.1-09(3)(e)(2))

H.3. Sequential closure of solid waste disposal units shall be implemented as described in the approved closure plan. (NDAC Subdivision 33.1-20-04.1-03(1)(g), NDAC Subsection 33.1-20-04.1-05(2), and NDAC Subdivision 33.1-20-04.1-05(5)(d))

The largest approved open area is 23.0 acres before sequential partial closure must be initiated. (NDAC Subdivision 33.1-20-04.1-05(5)(a))

H.4. No area of the landfill final cover, including, but not limited to, support berms and the outer slopes of any drainage control berm/swale shall be greater than the 25% (4:1) maximum slope allowed by NDAC Paragraph 33.1-20-04.1-09(4)(b)(3).

H.5. In accordance with NDAC Subsection 33.1-20-06.1-02(9), the Permittee shall place daily cover over any municipal solid waste that is placed within the Small Volume Industrial Waste and Special Waste Landfill.

In accordance with NDAC Subsection 33.1-20-06.1-02(10), the Permittee shall place intermediate cover material over the municipal solid waste and daily cover if additional solid waste or final cover will not be placed within one month.

H.6. The Department may require the Permittee to provide copies of pertinent information to a public office or library in or near Gwinner to serve as a repository of information for public purview. The information shall include the landfill permit application, plans, groundwater monitoring reports, monthly and annual reports, and other information necessary to keep the public informed of the landfill's compliance and operational status. (NDAC Section 33.1-20-02.1-04)

H.7. The proposed slope of the roadway on the final cover that is being utilized as a drainage swale is approved contingent upon inspection and evaluation by the Department once the site is closed. If upon inspection and evaluation by the Department, it is determined that the roadway is causing erosion problems and/or vegetation is not rated as excellent, the Permittee shall remove the road and reclaim the area with an approved final cover and an approved drainage swale. (NDAC Section 33.1-20-02.1-04)

H.8. No excavation, cell construction, or disposal in the currently permitted disposal area shown on Sheet C-01, Existing Conditions in the 2020 Permit Application and revisions is authorized until the Permittee provides documentation that the United States Fish

and Wildlife Service (USFWS) is notified of the activity and the activity is in compliance with any USFWS Easement Permits. (NDAC Section 33.1-20-02.1-04)

H.9. The Permittee shall use the approved survey level of twice background level when conducting radiation surveys in accordance with condition G.7. (NDAC Subsection 33.1-20-04.1-03(1)(a))

H.10. Prior to the acceptance of any special waste, the Permittee shall submit a radiation survey plan to the Department for review and approval. Upon approval by the Department, the Permittee shall conduct radiation surveys in accordance with the approved plan. (NDAC Section 33.1-20-02.1-04)

H.11. The Permittee shall submit monthly reports to the Department by the last day of the following month. The report shall include a summary of the past month's construction activity, operations and inspections of the facility. At a minimum, the following information shall be included:

a. Tonnage accepted for the month broken down by industrial waste, inert waste, municipal waste and special waste

b. Rejected waste loads

c. Information required in conditions G.5., G.7. and G.8.

d. Rainfall totals for events equal to or greater than the 25-year, 24-hour storm event

e. Map, including location and size (in acres) of the:

1. Operating area
2. Areas with interim cover
3. Areas with final cover

f. Current construction projects and upcoming construction projects for both new construction and closure projects

g. Any significant regional event(s) which impacted the facility during the month, including a brief summary of:

1. How the facility was impacted
2. The contingency plans that were initiated

h. Leachate head above liner in the landfill, amount of leachate generated, and how leachate is managed (i.e. surface impoundment or disposed of via injection well)

i. Amount of freeboard in the surface impoundment(s)

j. Condition of the pump(s) for leachate management

k. Summary of training conducted

(NDAC Section 33.1-20-02.1-04)

I. Scrap Metal and Appliance Pile Conditions:

I.1. The Permittee may stockpile segregated scrap metal and appliances in an approved area so long as the materials are stockpiled for recycling. The Permittee is encouraged to promote and support measures to recycle metal and segregate it from the waste stream. Appliances containing any chemical refrigerants, including, but not limited to, refrigerators, freezers, air conditioners, and dehumidifiers, shall be managed in such a way as to allow for the removal of refrigerants. Electronic waste or other prohibited materials shall not be commingled in the recycling pile. Metal items containing liquids shall be properly drained prior to delivery to the site. Any unrecyclable materials, contaminants or residue shall be properly managed in accordance with NDAC Article 33.1-20 and this permit. (NDAC Subsections 33.1-20-01.1-03(68) and (70))

J. Surface Impoundment Specific Conditions:

J.1. All surface impoundments shall be constructed, operated, maintained and inspected in accordance with NDAC Chapter 33.1-20-08.1.

All surface impoundments shall be maintained and inspected to ensure orderly operation and ensure adequate storage capacity, and two (2) foot of freeboard must be maintained. After significant runoff events, prior to winter freeze-up, and/or in anticipation of a period of heavy precipitation, the surface impoundment's capacity shall be restored as soon as practicable to ensure at least a 25-year, 24-hour stormwater management capacity. (NDAC Paragraph 33.1-20-04.1-09(2)(3)(a))

The surface impoundments shall not be used for management of stormwater that has not been in contact with waste. The surface impoundments shall be protected from surface water run-on from adjacent areas. (NDAC Subdivision 33.1-20-04.1-09(3)(d))

K. Closed Solid Waste Landfill Units Conditions:

K.1. All closed areas must be managed and maintained in accordance with the closure and postclosure requirements of NDAC Section 33.1-20-04.1-09, an approved closure plan, an approved postclosure plan and this permit. Closed solid waste management units may not be used for cultivated crops, heavy grazing, buildings, or any other use which might disturb the protective vegetative and soil cover. (NDAC Subdivision 33.1-20-04.1-09(4)(a))

K.2. The Permittee shall conduct postclosure evaluations and investigations of the closed landfill units in accordance with the approved postclosure care plan. (NDAC Subdivision 33.1-20-04.1-09(5))

K.3. A summary of inspections, evaluation and repair of closed landfill areas shall be included in the Permittee's annual report. (NDAC Subdivision 33.1-20-04.1-04(3)(e))

Should questions or issues arise, the Permittee shall contact the North Dakota Department of Environmental Quality at 701-328-5166.

In consideration of information provided regarding the facility and its operation and in consideration of the conditions above, the North Dakota Department of Environmental Quality hereby issues a permit to Waste Management of North Dakota, Inc./Big Dipper Enterprises, Inc.

This permit is effective as of _____, 2021 and shall remain in effect until _____, 2027, unless modified, superseded, or revoked under Section 33.1-20-02.1-07 NDAC or continued in accordance with Section 33.1-20-02.1-08 NDAC.

_____ _____
Charles R. Hyatt, Director Date
Division of Waste Management

Attachments:

Attachment 1: Historical Document List

Attachment 2: Guideline 5-Quality Assurance for Construction of Landfill and Surface Impoundment Liners, Caps and Leachate Collection Systems

Attachment 1
Historical Documents List

May 2021	E-mail with construction plans for final cover, excavation of Cell 11 and landfill expansion perimeter berms, May 2021
July 2021	"Permit Modification Drawings for Dakota Landfill Permit 0257 North Development Area," July 2021.
July 2021	"Waste Identification and Acceptance Plan", Wenck Associates, July 2021.
June 2001	"Design Report – North Development Area", Wenck Associates, May 2020. Revised June 2021.
October 2020	"Hydrogeologic Investigation Report - North Development Area", Wenck Associates, October 2020
June 2019	"Detailed Hydrogeologic Investigation Workplan, North Development Area" Wenck Associates, June 2019.
May 2019	"Soil Survey Work Plan Dakota Landfill Proposed North Development Area," Wenck Associates, May 2019
May 2, 2016	"Pre-Application Report, Dakota Landfill Proposed North Development Area, Gwinner, North Dakota", Wenck Associates, May 2, 2016.
September 2012	"Amended Sand Lens Investigation of Future Cells 9 & 10 and MW-41 Installation Documentation," Liesch, September 2012.
April 2012	"SW-257 Permit Renewal," Interstate Engineering Inc., April 2012.
July 2006	"Modeling and Design Report in Support of a Final Cover Design Modification", Dwyer Engineering. July 2006.
June 2003	"Environmental Monitoring Plan for Dakota Municipal Solid Waste Landfill", June 2003.
October 2001	"Phase II Permit Modification", Foth and Van Dyke, October 2001
June 2001	"Wetlands Delineation Report," High Plains Consortium, June 2001
March 2001	"Phase II Permit Modification", March 2001
November 1995	"Hydrogeologic Summary," Foth & Van Dyke, November 1995.
	"Site Characterization," Foth & Van Dyke, November 1995.
September 1995	"Compliance Assurance Plan" Foth & Van Dyke, September 1995.

April 1994	"Closure and Post-Closure Plan," Foth & Van Dyke, April 1994.
March 1994	"Site Characterization Report," Foth & Van Dyke, March 1994.
November 1993	"Soil Borrow Plan" Foth & Van Dyke, November 1993.
May 1993	"Permit Renewal Application", May 1993.
April 1993	"Hydrogeologic Investigation of the Dakota Landfill," USA Waste Services, April 1993.
March 1993	"December 1992 Groundwater Quality Data for the Dakota Landfill, Gwinner, ND," Foth & Van Dyke, March 1993.
1993	Big Dipper Enterprises, Inc. SW-257 Drum Excavation Project;
	"Site Suitability Review of the Dakota Landfill", North Dakota State Water Commission and the North Dakota Geological Survey, 1993.
August 1992	"Bay West Analytical Laboratory Quality Assurance Manual," December 1990, revisions October 1991 and August 1992.
February 1992	"Application for Solid Waste Disposal", WHI, Incorporated, February 1992.
February 1991	"Closure Plan Municipal Landfill," Scope ID: 91B3, Foth & Van Dyke, February 1991.
November 1990	"Hydrogeologic Investigation of the Big Dipper Landfill and Special Waste Area, Gwinner, ND," Foth & Van Dyke, November 1990.
September 1988	"Sanitary Landfill Management Plan," Webster, Foster & Weston, September 1988.
February 1985	"Soil Analysis at Big Dipper Enterprises, Inc.'s Dakota Landfill Facility, Gwinner, ND," Soil Exploration Co., February 1985.
January 1985	"Soil Analysis of Big Dipper Enterprises, Inc.'s Dakota Landfill Facility, Gwinner, ND," Soil Exploration Co., January 1985.
August 1981	Proposed Disposal Site, Gwinner, ND, "Preliminary Hydrogeological Evaluation" Browning-Ferris Industries, August 1981.